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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-------------------------------|-----------------|----------------------|-------------------------|------------------|--|
| 09/171,018 | 10/07/1998 | JOSEPH B VOLPE | 6178-9 7540 | | |
| 7 | 7590 01/02/2003 | | | | |
| Zito tlp | | | EXAMINER | | |
| 26005 RIdge R Damascus, MI | | | YE, LIN | | |
| | | | ART UNIT | PAPER NUMBER | |
| | | | 2612 | | |
| | | | DATE MAILED: 01/02/2003 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

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| | Application No. | | Applicant(s) | | | | | |
|---|---|---|---|-------|--|--|--|--|
| | 09/171,018 | | VOLPE, JOSEPH | в 🤾 | | | | |
| Office Action Summary | Examiner | | Art Unit | | | | | |
| | Lin Ye | | 2612 | | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status | 96(a). In no event, however within the statutory mining ill apply and will expire S cause the application to | er, may a reply be time num of thirty (30) days IX (6) MONTHS from to become ABANDONED | ely filed will be considered timel he mailing date of this c (35 U.S.C. § 133). | | | | | |
| 1) Responsive to communication(s) filed on 10 C | 1) Responsive to communication(s) filed on <u>10 October 2002</u> . | | | | | | | |
| 2a)⊠ This action is FINAL . 2b)□ Thi | s action is non-fin | al. | | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | | |
| Disposition of Claims | ex parte Quayle, | 1935 C.D. 11, 4: | 03 U.G. 213. | | | | | |
| 4) Claim(s) <u>1,2,4,5,13 and 16-30</u> is/are pending i | n the application. | | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | | | |
| 6)⊠ Claim(s) <u>1,2,4,5,13 and 16-30</u> is/are rejected. | | | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | | | |
| Application Papers | | | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. | | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | | |
| 11) The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner. | | | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | | | |
| 12)☐ The oath or declaration is objected to by the Examiner. | | | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | | | |
| 2. Certified copies of the priority documents | s have been recei | ved in Application | n No | | | | | |
| 3. Copies of the certified copies of the prior application from the International Bur * See the attached detailed Office action for a list | eau (PCT Rule 1 | 7.2(a)). | | Stage | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | | | |
| a) ☐ The translation of the foreign language pro 15)☐ Acknowledgment is made of a claim for domesti | * * | | | | | | | |
| Attachment(s) | • | | | | | | | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) 🔲 | | (PTO-413) Paper No atent Application (PT | | | | | |

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DETAILED ACTION

Specification

1. Claim 1 is objected to because of the following informalities:

The amended claim 1 filed on 10/10/02 is different from the version with markings.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 (line 14) and claim 18 (line 2), both recite the limitation "an encoder". Is the "encoder" in claim 18 same with "encoder" in claim 1 or claim 18 recites a different "encoder"?

Response to Arguments

4. Applicant's arguments with respect to claims 1-2, 4-5,13, and 16-30 filed on 10/10/02 have been considered but are moot in view of the new ground(s) of rejection.

Although a new ground of rejection has been used to address additional limitations that have been added to claim 1, a response is considered necessary for several of the

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applicant's arguments since the primary reference, Stuff, will continue to be used to meet several of the claimed limitations.

For claims 1-2, 4-5,13, and 16-30, the applicant argues that the invention is the entire system or method to accomplish surveilling subjects and view the surveilled objects from a remote receiver station, not the individual components from the references of Stuff, McClenahan, Rod, Jenkins. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-2, 5, 13, 17-18, 21-24, 26, and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stauff et al. U.S. Patent 3,798,796 in view of McClenahan et al. U.S Reg. Number H1, 891 and Baxter et al. U.S. Patent 5,486,853.

Referring to claims 1, 5 and 18, the Stauff reference discloses a television camera (4) is removably attached to an independent optical view device (optical instrument 2) which

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having at least one optical viewing path viewed through an eyepiece (See Col. 2, lines 63-68 and Col 3, lines 1-13). The camera control unit (5) is for creating real time video signals from the camera (4) in optical viewing path (See Col.3 lines 24-26). A transmitter coupled to the camera control unit for wireless transmission of the real time video signals (a radio link 8 transmits video signal to a remote receiving station 9). This display monitor allows one or more instructors or trainees (10, 11) to view from a distance, under good conditions, what trainee operator 1 sees.

It is well known to transmit different signals with differing frequencies. Although Stauff discloses the output of a single trainee being displayed on the monitor, it would have been obvious to have more than one trainee operating the optical device at a single time. This would allow each trainee has more training time (by not having to wait for his/her "turn") as well as giving instructors the flexibility to compare the trainee's "side-by-side". There fore, it would have been obvious to have more than one optical viewing device in the field at one time, wherein the output signals are distinguishable from each other- by frequencies transmitted by said camera control unit, for example.

Stauff reference does not have detail for optical instruments which attached a beam splitter.

McClenahan reference discloses in Figures 1 and 2, an optical system (10) for displaying a recording the same image of a target (12) as viewed by a shooter (14) through a rifle sight (16). The optical system (10) includes an optical beam splitter (20), wherein the beam splitter divides the at least one optical viewing path into a first and a second optical viewing paths; and a electronic video imaging device (color video camera 24) inside a waterproof housing

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(26). Hosing (26) attaches to rifle sight (16) (See Col 3. lines 1-5). The electronic video imaging device that receives an optical image form the second split beam path and converts the optical image into an electronic image signal, wherein the video imaging device is removably attached in alignment with the eyepiece without internal modification of the basic optical viewing device and adjustable to accommodate varying sizes eyepieces as shown in Figure 2.

This would be an advantage over Stauff's image system in that could quickly and easily redirect image signal to a video camera and makes a more compact and better balances training aid for remote instructors. For that reason, it would have been obvious to one of ordinary skill in the art at the time to see the optical instrument device attached with a beam splitter for redirecting image signal to the video camera disclosed by Stauff.

The Staff reference does not explicitly states the camera control unit includes an encoder for adding source identifying information as a unique identification code to the electronic image signal.

The Baxter reference discloses in Figure 8 and 9, the imaging system includes a encoder (processor 70) adds camera identification to the electronic image signal and transmits to computer 16 (See Col. 7, lines 62-68). The Baxter reference is a evidence to one of ordinary skill in the art to see the an advantage of communication system has encoder to adds camera identification information to the electronic image signal to avoiding the information loss and easy identify a multiple signals inputted in the system. For that reason, it would have been obvious to see the camera control unit (5) includes an encoder for adding source identifying information as a unique identification code to the electronic image signal disclosed by Stauff.

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Referring to claim 2, the McClenahan imaging system comprising an eyepiece (14) terminates at least one of at least one optical viewing paths, said beam splitter (20) being aligned with said eyepiece as shown in Figure 1 (See Col. 3, lines 28-39).

Referring to claim 13, the Staff reference discloses a viewing screen connected to the receiver (See Col. 3, lines 32-37), and terminating said second split beam path (as above discussed in Claim 1, a television camera 4 is attached on optical instrument 2. It would been obvious to see a second split beam path transmits a video data to the viewing screen), said viewing screen having a viewing surface on which said second split beam path is substantially centrally disposed as shown in Figure 1.

Referring to claim 17, McClenahan imaging system includes monocular telescopic rifle sight (16) attached with video camera (24). It would have been obvious to incorporate such a design in binocular or periscope. Official Notice is taken that both these are often used in military applications.

Referring to claim 21, the Stauff reference discloses using radio link to transmit video signal to a receiver (monitor station 9) as discussed in claim 1. In order to receive a base band (frequency) video signal to an output device, inherently the receiver should have a decoder for decoding the encoded electronic video signal.

Referring to claim 22, the McClenahan's viewing devices comprises the beam splitter and the electronic video imaging device are mounted in a circular member having an inner ring that removably attaches to the eyepiece of the optical viewing device, wherein the ring is replaceable with alternate rings of varying diameter to accommodate varying diameters of alternate eyepieces (See Col. 3, lines 10-25).

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Referring to claims 23 and 24, the Stauff, McClenahan and Baxter references disclose all subject matter as discussed with respected to same comment as with claim 1.

Referring to claim 26, the Stauff, McClenahan and Baxter references disclose all subject matter as discussed with respected to same comment as with claim 5.

Referring to claim 29, the Stauff, McClenahan and Baxter references disclose all subject matter as discussed with respected to same comment as with claim 21.

Referring to claim 30, the Stauff, McClenahan and Baxter references disclose all subject matter as discussed with respected to same comment as with claim 22.

Claims 4 and 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stauff et al.
 U.S. Patent 3,798,796 in view of McClenahan et al. U.S Reg. Number H1, 891, Baxter et al.
 U.S. Patent 5,486,853 and Rod U.S. Patent 5,924,868.

Referring to claims 4 and 25, the Stauff, McClenahan and Baxter references references disclose all subject matter as discussed in respected claims 1 and 23, except the references do not explicitly states video signals are distinguishable from one another by data in an on screen display.

Rod reference discloses in Figure 3, the system includes cameras and display eyewear and display monitors for use by the shooter and/or the instructor. A head mounted camera (72) provides a video signal (74) to camera controller (76) and forward to split screen processor (80). A camera (82) provides a video signal to split screen processor (80). The video monitor can display each of the image signals simultaneously.

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This would be an advantage over Stauff's image system in that the instructors could quickly and easily monitor the operators in one screen. For that reason, it would have been obvious to one of ordinary skill in the art at the time to see video signals are distinguishable from one another by data in an on screen display by said camera control unit disclosed by Stauff.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stauff et al. U.S.
 Patent 3,798,796 in view of McClenahan et al. U.S Reg. Number H1, 891, Baxter et al. U.S.
 Patent 5,486,853 and Jenkins et al. U.S. Patent 5,644,386.

Referring to claim 16, the Staff, McClenahan and Baxter references disclose all subject matter as discussed in respected claim 1, except the Staff reference does not explicitly states the wireless transmission comprises a satellite link instead of radio link and the data represents information from a global positions sensor.

Jenkins reference discloses in Figure 1, a system (10) shown for producing, processing, displaying, and transmitting images of one or more targets in a target scene 12. A Global Positioning System (GPS) transmitter (18) transmits a signal fro providing accurate position data for the vehicle (14). The processing center (17) manipulates the resulting data into packets of information and transmits these packets of information by a limited bandwidth communications link (20) to a remote site (22) for display on a display (24) (See Col. 3, lines 49-68).

This would be an advantage over Stauff's image system in that the remote viewer can communicate with the operators without the distance limitation and provide high quality imaging digital data and accurate target position data in real time. For that reason, it would

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have been obvious to one of ordinary skill in the art at the time to see wireless transmission comprises a satellite link disclosed by Stauff.

9. Claims 19-20 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stauff et al. U.S. Patent 3,798,796 in view of McClenahan et al. U.S Reg. Number H1, 891, Baxter et al. U.S. Patent 5,486,853 and Piety et al. U.S. Patent 5,637,871.

Referring to claims 19-20 and 27-28, the Staff, McClenaha and Baxter references disclose all subject matter as discussed in respected claims 1, 18 and 23, except the Baxter reference does not explicitly states the source identifying information with video displays on screen and a key pad decoder adds the identifying information to the video signal.

The Piety reference discloses in Figures 4 and 5, an imaging system has a hardware keypad for enabling the user to add identification information, such time and date to video image signal and display the source identifying information with video on user interface screen (300) (See Col. 11, lines 49-55 and Col10, lines 25-30). This would been an advantage to has key pad decoder for entering user's desired source unique identification of camera to the video image data and transmit to remote screen which user can identify the information on the display. For that reason, it would have been obvious to see the camera control unit (5) includes an key pad decoder for adding source identifying information as a unique identification code to the electronic image signal and displaying both data on the screen disclosed by Stauff.

Conclusion

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10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office

action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until

after the end of the THREE-MONTH shortened statutory period, then the shortened statutory

period will expire on the date the advisory action is mailed, and any extension fee pursuant to

37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of

this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Lin Ye whose telephone number is (703) 305-3250. If attempts to

reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R

Garber can be reached on (703) 305-4929.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC. 20231

Or faxed to:

(703) 872-9314

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

ANDREW CHRISTENSEN SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600

Lin Ye December 30, 2002